

Amendments to the Claims

1. (currently amended): A method for allocating at least one shared radio resource within a communication system including at least one base station adapted to manage data service access requests, the method comprising:

a) determining whether a number of existing data service access requests exceeds the number of shared radio resources;

b) servicing each of the existing data service access requests on a first-in-highest-priority basis when the number of existing data service access requests does not exceed the number of shared radio resources;

c) assigning a priority value to each of the existing data service access requests when the number of existing data service access requests exceeds the number of shared radio resources;

d) servicing each of the existing data service access requests based on the respective priority values assigned thereto; and

e) adjusting the priority value assigned to each of the existing data service access requests when a new data service access request is received by adjusting a frame count value for an existing data service access request according to the equation $FC_{adj} = FC - B$, where FC_{adj} is an adjusted frame count value for the existing data service access request, FC is a present frame count value for the existing data service access request, and B is an average of the frame count values for each of the existing data service access requests.

2. (original): The method of claim 1, further including:

f) servicing each of the existing data service access requests based on adjusted priority values determined in e).

3. (original): The method of claim 1, wherein d) includes allocating a predetermined number of data frames to be transmitted for each data service access request that is serviced.

4. (original): The method of claim 1, wherein d) includes allocating a predetermined time period in which to transmit data frames for each data service access request that is serviced.

5. (original): The method of claim 1, wherein d) includes servicing a first plurality of existing data service access requests on a first-in-highest-priority basis when the priority values for the first plurality of existing data service access requests are the same.

6. (original): The method of claim 1, wherein c) includes assigning a frame count value to each of the existing data service access requests when the number of existing data service access requests exceeds the number of shared radio resources.

7. cancelled

8. (original): The method of claim 1, wherein d) includes servicing each of the plurality of existing data service access requests based on a frame count value assigned to each of the existing data service access requests.

9. (original): The method of claim 8, wherein d) further includes granting priority to an existing data service access request with a lowest frame count value.

10. (original): The method of claim 1, wherein a) includes determining whether a plurality of existing data service access requests exceeds a number of shared supplemental channels.

11. cancelled

12. (original): The method of claim 1, wherein c) includes determining a priority value for an existing data service access request based on at least one resource priority parameter from the group consisting of frame count, transmission time,

number of data frames queued, signal-to-noise ratio, FER, BER, transmission delay, and jitter.

13. (currently amended): An apparatus for allocating at least one shared radio resource within a wireless communication system including at least one base station adapted to manage data service access requests, the apparatus comprising:

at least one supplemental channel circuit, each supplemental channel circuit corresponding to one shared radio resource;
a summer for combining forward link data frames received from the plurality of supplemental channel circuits;
a modulator for modulating a summer output signal to be transmitted to at least one wireless subscriber devices
and
a controller programmed to:

- a) determine whether a number of existing data service access requests exceeds the number of shared radio resources;
- b) service each of the existing data service access requests on a first-in-highest-priority basis when the number of existing data service access requests does not exceed the number of shared radio resources;
- c) assign a priority value to each of the existing data service access requests when the number of existing data service access requests exceeds the number of shared radio resources;
- d) service each of the existing data service access requests based on the respective priority values assigned thereto; and
- e) adjust the priority value assigned to each of the existing data service access requests when a new data service access request is received by adjusting a frame count value for an existing data service access request according to the equation $FC_{adj} = FC - B$, where FC_{adj} is an adjusted frame count value for the existing data service access request, FC is a present frame count value for the existing data service access request, and B is an average of the frame count values for each of the existing data service access requests.

14. (original): The apparatus of claim 13, wherein the controller is further programmed to
- f) service each of the existing data service access requests based on adjusted priority values determined in e).
15. (original): The apparatus of claim 13, wherein under d), the controller is further programmed to allocate a predetermined number of data frames to be transmitted for each data service access request that is serviced.
16. (original): The apparatus of claim 13, wherein under d), the controller is further programmed to allocate a predetermined time period in which to transmit data frames for each data service access request that is serviced.
17. (original): The apparatus of claim 13, wherein under d), the controller is further programmed to service a first plurality of existing data service access requests on a first-in-highest-priority basis when the priority values for the first plurality of existing data service access requests are the same.
18. (original): The apparatus of claim 13, wherein under c), the controller is further programmed to assign a frame count value to each of the existing data service access requests when the number of existing data service access requests exceeds the number of shared radio resources.
19. (cancelled)
20. (original): The apparatus of claim 13, wherein under d), the controller is further programmed to service each of the plurality of existing data service access requests based on a frame count value assigned to each of the existing data service access requests.

21. (original): The apparatus of claim 20, wherein under d), the controller is further programmed to grant priority to an existing data service access request with a lowest frame count value.

22. (original): The apparatus of claim 13, wherein under a), the controller is further programmed to determine whether a plurality of existing data service access requests exceeds a number of shared supplemental channels.

23. (cancelled)

24. (original): The apparatus of claim 13, wherein under c), the controller is further programmed to determine a priority value for an existing data service access request based on at least one resource priority parameter from the group consisting of frame count, transmission time, number of data frames queued, signal-to-noise ratio, FER, BER, transmission delay, and jitter.

25. (cancelled)